

**WHAT IS CLAIMED IS:**

1. A composition comprising a polypeptide, wherein said polypeptide comprises a self C5 amino acid segment and a non-self amino acid segment, wherein the length of said non-self amino acid segment is less than 350 amino acids.
2. The composition of claim 1, wherein administration of said polypeptide to a mammal induces an anti-C5 response in said mammal, wherein the genome of said mammal comprises a nucleic acid that encodes said self C5 amino acid segment.
3. The composition of claim 1, wherein said non-self amino acid segment is a bacterial amino acid segment.
4. The composition of claim 3, wherein said bacterial amino acid segment is an MBP amino acid segment.
5. The composition of claim 1, wherein said non-self amino acid segment is a C5 amino acid segment.
6. The composition of claim 5, wherein said non-self C5 amino acid segment is non-naturally occurring.
7. The composition of claim 5, wherein said non-self C5 amino acid segment comprises at least two T cell epitopes.
8. The composition of claim 5, wherein said non-self amino acid segment is a vertebrate C5 amino acid segment.
9. The composition of claim 8, wherein said non-self vertebrate C5 amino acid segment is a mammalian C5 amino acid segment.
10. The composition of claim 8, wherein said non-self vertebrate C5 amino acid segment comprises at least two T cell epitopes.
11. The composition of claim 1, wherein the length of said non-self amino acid segment is less than 300 amino acids.

12. The composition of claim 1, wherein the length of said non-self amino acid segment is less than 250 amino acids.
13. The composition of claim 1, wherein the length of said non-self amino acid segment is less than 200 amino acids.
14. The composition of claim 1, wherein said non-self amino acid segment is viral.
15. The composition of claim 1, wherein said non-self amino acid segment is fungal.